DOCUMENT RESUME

ED 195 872 CG 014 824

AUTHOR Morris, Larry W.; Gilliland, Jack C.
TITLE Social Anxiety Factors: Relation to Introversion and Neuroticism.
PUB DATE Sep 80
NOTE 11p.; Paper presented at the Annual Convention of the American Psychological Association (88th, Montreal, Quebec, Canada, September 1-5, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Affective Measures; *Affiliation Need; *Anxiety; Behavior Rating Scales; Depression (Psychology); Fear; *Neurosis; *Personality Problems; Personality Traits; Rejection (Psychology); *Social Behavior; Withdrawal (Psychology)
IDENTIFIERS *Extraversion Introversion

ABSTRACT

In order to place research on social anxiety in proper perspective, the factors actually measured by social anxiety scales must be examined. Five social anxiety scales and four personality questionnaires were administered to college undergraduates (N=78). Factor analyses of the data revealed two distinct factors. The first factor, to which neuroticism alone was related, was identified as fear of negative evaluation and social rejection. The second factor, to which extraversion-introversion and affiliation were most strongly related, was identified as social avoidance and distress. Neither social anxiety factor was related to interpersonal trust or self-disclosure. Results allow similarities to be drawn between social anxiety and trait anxiety, and distinctions to be made between social anxiety and introversion. (Author/NRB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED195872

Social Anxiety Factors: Relation to Introversion and Neuroticism

Larry W. Morris and Jack C. Gilliland

Middle Tennessee State University

Abstract

Examined the relationship among five social anxiety scales. Factor analysis of the data obtained from 78 undergraduates revealed two distinct factors. The first factor, to which neuroticism alone was related, was identified as fear of negative evaluation and social rejection. The second factor, to which extraversion-introversion and affiliation were most strongly related, was identified as social avoidance and distress. Implications are drawn for the similarity of social anxiety to trait anxiety, the distinction between social anxiety and introversion, and the most advantageous use of existing social anxiety scales. Neither social anxiety factor was related to interpersonal trust or self-disclosure.

CG 014824

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Larry Morris

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Social Anxiety Factors: Relation to Introversion and Neuroticism

In order to place current research in social anxiety in proper perspective, it is important to know what is actually measured by existing social anxiety scales. This study takes two approaches to answering this question. In the first place, several social anxiety scales were administered and intercorrelated to determine whether a single common factor is represented therein, and if so which scales are the most homogeneous measures of it. Since multidimensional analyses of other types of anxiety have been more useful than unidimensional approaches, it was expected that more than one social anxiety factor would be identified. Secondly, this study was designed to determine how the factor(s) represented in social anxiety scales relate to the two most important and most thoroughly investigated dimensions in personality trait research: neuroticism (or trait anxiety) and extraversion-introversion. It is important to determine whether social anxiety is just another label for neuroticism, introversion, or for a combination of the two, that is, neurotic introversion.

Method

Nine questionnaires were administered in a different random order to each of 78 (43 female and 35 male) volunteer college students during a regular classroom period. Five social anxiety scales were included: a) Fear of Negative Evaluation (Watson & Friend, 1969), b) Fear of Social Rejection (Good & Parker, 1977), c) Interpersonal Anxiety (Patterson, 1966), d) Sensitivity to Rejection (Mehrabian, 1970), and e) Social Avoidance and Distress (Watson & Friend, 1969). The Social Avoidance and Social Distress subscales of the latter were scored separately.

Other questionnaires administered were a Self-Disclosure Questionnaire (Jourard & Resnick, 1970), the Eysenck Personality Inventory as a measure of extraversion-introversion and neuroticism (Eysenck & Eysenck, 1968), Rotter's (1967) Interpersonal Trust scale, and Mehrabian's (1970) Affiliative Tendency scale.

All subjects were combined into one group for the correlational analyses of the data. In addition, four extraversion x neuroticism groups consisting of 10 subjects each were formed for analysis of variance purposes. Subjects scoring at the median on either dimension were eliminated and additional subjects were dropped at random to obtain an equal number of subjects per group. Extraversion and neuroticism were uncorrelated (-.11).

Results and Discussion

Social Anxiety Factors.

Intercorrelations among the six social anxiety scores are presented in Table 1. While all but two of the correlation coefficients are statistically significant, it is also clear that the social anxiety measures are not interchangeable, with the highest correlation being .66. Factor analysis of the matrix of intercorrelations revealed two factors with eigenvalues greater than 1.00, accounting for 54% and 16% of the variance, respectively. Following orthogonal rotation of the two factors, the highest loadings on Factor 1 were for Fear of Negative Evaluation (.86), Fear of Social Rejection (.82), and Sensitivity to Rejection (.67). The highest loadings on Factor 2 were for Social Avoidance (.90) and Social Distress (.81). Interpersonal Anxiety loaded equally on the two factors (.56). (For more detailed information, see the correlations with estimated factor scores presented in Table 1.)

These two clearly interpretable factors represent the two dimensions aptly named by Watson and Friend (1969) as Fear of Negative Evaluation (Factor 1) and Social Avoidance and Distress (Factor 2). The Fear of Negative Evaluation scale and the Fear of Social Rejection scale both appear to be homogeneous measures of the first dimension, reflecting cognitive concern about social interactions, negative expectations regarding social evaluation, and sensitivity to potential approval, disapproval, or rejection. The Social Avoidance and Distress scale measures the second dimension well, reflecting both actual and desired avoidance of social situations and the experience of negative emotion, discomfort, and nervousness when placed in such situations. Both dimensions are represented in the Interpersonal Anxiety scale, which may be viewed as either an advantage or disadvantage depending on the purposes of the researcher.

The identification of these two social anxiety factors is important in several respects. First, social anxiety researchers typically use only one scale as a predictor variable, implicitly assuming that different scales used in different studies are interchangeable, and often with little attention to choosing the scale most applicable to the content of the study. Second, this multidimensional analysis of social anxiety has much in common with analyses of general (trait) anxiety and test anxiety, both of which have been more thoroughly researched. The fear of negative evaluation factor identified here bears considerable resemblance to the cognitive factors involved in trait anxiety (ego-threat) and test anxiety (self-preoccupation, worry, negative performance expectancies); concepts such as self-consciousness and evaluation apprehension express well the common cognitive considerations involved in the various types of anxiety. The social avoidance and distress factor identified here likewise resembles the physiological arousal and behavioral avoidance

components of other specific anxieties which are neither independent of nor synonymous with the cognitive factors mentioned above. Third, these data raise the question of whether one factor or the other represents "social anxiety", with the other representing a contaminating factor. Specifically, Patterson and Strauss (1972) argue that social avoidance items assess social activity, affiliation, or extraversion and should be eliminated from measures purporting to assess social anxiety. Since social avoidance and social distress are closely related, it is our opinion that social avoidance and distress is a component of social anxiety and that both of these factors should be considered separately and in combination in studies of social anxiety. In order to do so in this study, estimated factor scores were computed for each subject and included in further data analysis. The correlation between the two sets of estimated factor scores was -.01.

Introversion and neuroticism. Neuroticism as measured by the Eysenck Personality Inventory is an index of general anxiety or trait anxiety and correlates well with other such measures. As such, one would expect a relationship between neuroticism and social anxiety. Introversion, the polar opposite of extraversion and need for affiliation, is only weakly related to general anxiety but may be more strongly related to social anxiety (cf. Morris, 1979, pp. 81-85).

The data of the present study indicate that social anxiety is much more strongly related to neuroticism than to introversion; however, it depends on which component of social anxiety is being considered. For all subjects combined, significant positive correlations were found between neuroticism and all social anxiety measures (see Table 1). The weakest relationship was with Social Avoidance (.27) and the strongest was with Fear

of Negative Evaluation (.59). Consistently, neuroticism was more strongly related to the fear of negative evaluation factor (Factor 1 scores) than to the social avoidance and distress factor (Factor 2 scores), r = .51 and .28, respectively, though both were statistically significant.

This pattern of correlations was reversed for both extraversion-introversion and affiliation scores. Neither extraversion nor affiliation correlated significantly with Factor 1 scores (-.22 and .19, respectively), but both were inversely related to Factor 2 scores (-.36 and -.46, respectively). The only specific correlation which deviated from this pattern was a negative relationship (-.27) between extraversion and the Fear of Negative Evaluation scale.

The 2 x 2 (extraversion x neuroticism) analyses of variance further demonstrate that neuroticism is more strongly related than introversion to social anxiety and that the two personality variables are related to different components of social anxiety. As shown in Table 2, introverts scored higher than extraverts only on Factor 2 scores (the social avoidance and distress factor), Social Avoidance, Social Distress, and Interpersonal Anxiety. In contrast, high neuroticism subjects were higher than low neuroticism subjects on all social anxiety measures except the Social Avoidance subscale and the social avoidance and distress factor. Finally, it is surprising that there were no significant extraversion-introversion x neuroticism interaction effects, since it is generally held that neurotic introverts are the most anxious and that stable extraverts are the least anxious.

Beyond the clarification of the relationship between general anxiety (neuroticism) and social anxiety, these findings are important to a fuller understanding of the nature of the introverted personality. While introverts

are prone to engage in more social avoidance and to experience more social distress than extraverts, it is erroneous to assume that these behavioral differences are necessarily accompanied by a fear of disapproval or negative evaluation on the part of introverts or a lack thereof on the part of extraverts. There is some evidence that introverts expect and anticipate relatively high degrees of interpersonal disagreement and conflict and thus find social situations to be relatively aversive. But it is not at all clear that they take such conflict as a negative personal evaluation or that they avoid it because of a fear of such negative evaluation (cf. Morris, 1979, pp.47-50).

Interpersonal Trust and Self-Disclosure. There were no significant correlations of social anxiety variables with Interpersonal Trust scores and only one with Self-Disclosure scores: Sensitivity to Rejection correlated negatively with Self-Disclosure (-.31). It was hypothesized that correlations between social anxiety and self-disclosure would be different for introverted and extraverted subjects, but correlations computed separately for 29 introverts and for 37 extraverts failed to support the hypothesis.

References

Eysenck, H. J., & Eysenck, S. B. Manual: Eysenck Personality Inventory. San Diego: Educational and Industrial Testing Service, 1968.

Good, L. R. & Parker, C. C. A Fear of Social Rejection Scale. Psychology. 1977, 14, 69-70.

Jourard, S. M. & Resnick, J. L. Some effects of self-disclosure among college women. Journal of Humanistic Psychology, 1970, 10, 84-93.

Mehrabian, A. The development and validation of measures of affiliative tendency and sensitivity to rejection. Educational and Psychological Measurement, 1970, 30, 417-428.

Morris, L. W. Extraversion and introversion: An interactional perspective. Washington: Hemisphere Publishing Corporation, 1979.

Patterson, M.L. A validity study of interpersonal anxiety. Unpublished masters thesis, Northwestern University, 1966.

Patterson, M. L. & Strauss, M. E. An examination of the discriminant validity of the Social Avoidance and Distress scale. Journal of Consulting and Clinical Psychology, 1972, 39, 169.

Rotter, J. B. A new scale for the measurement of interpersonal trust. Journal of Personality, 1967, 35, 651-665.

Watson, D. & Friend, R. Measurement of social-evaluative anxiety. Journal of Consulting and Clinical Psychology, 1969, 33, 448-457.

Table 1

Pearson Product-Moment Correlation Coefficients (N = 78)

	1	2	3	4	5	6
1. Interpersonal Anxiety						
2. Social Distress	.66*					
3. Social Avoidance	.38*	.62*				
4. Fear of Negative Evaluation	.50*	.48*	.23			
5. Sensitivity to Rejection	.55*	.42*	.30*	.54*		
6. Fear of Social Rejection	.42*	.38*	.20	.61*	.38*	
7. Estimated Factor 1 scores	.58*	.38*	.03	.86*	.67*	.82*
8. Estimated Factor 2 scores	.58*	.81*	.89*	.17	.33*	.07

*p < .05

Table 2

Mean Scores

(N=20 Per Group)

	Neuroticism			Extraversion		
	High	Low	F-ratio	High	Low	F-ratio
Interpersonal Anxiety	16.15	11.55	12.92*	11.15	16.55	17.81*
Social Avoidance	4.30	3.20	2.10	2.75	4.75	6.80*
Social Distress	6.65	3.35	12.62*	3.65	6.35	8.45*
Fear of Negative Evaluation	18.90	9.20	26.[illegible]*	12.20	15.90	3.87
Sensitivity to Rejection	21.00	3.65	6.13*	6.05	18.60	3.21
Fear of Social Rejection	10.95	5.45	12.95*	6.85	9.55	3.12
Estimated Factor 1 scores	6.35	-7.15	21.33*	-3.25	2.45	3.80
Estimated Factor 2 scores	3.35	-1.95	2.77	-4.10	5.50	9.08*

*$p < .05$